NARAD

Surveillance Outbreak Response Management & Analysis System

Real-time Digital Surveillance, Disease Control & Outbreak Management including early detection and Line-lists

DATA COLLECTION TOOLS

- Surveillance & Fever Clinics
- Contact & PUI Tracing
- Manage Positive PUI Cases
- Line Listing Quarantines
- Testing Data & ICMR Integration
- Hospital Beds, Equipment & Supplies

DATA ANALYTICS

- Containment, Contacts Mapping
- Trend Analytics (Case Load, 2x, Fatality Rates)
- Cognitive Services for Twitter
- Hospital & Case Management
- Supplies & Equipment Gap Analysis
- GIS Visualization, CCR and CMO Dashboard

COMMAND & CONTROL HUB

- COVID Outbreak Management System
- Custom Built Command & Control Center
- Mobile App for MoH Field Contact Officers
- Case Loads & Hotspot Districts/Municipalities
- OCR & Spreadsheet Style Data Entry Options
- Cognitive Services Based Centralized Data Management On Cloud
- Real-Time Digital Surveillance
- Integrated with Microsoft Teams, O365 & Azure

WORKFLOW AUTOMATION

- Automation of manual tasks of capturing data
- Lists & Reminders for Field Cos & Data Entry
- Manage & Reporting To Various Authorities
- Managing Workflows
  - Auto mapping of contacts
  - Line Lists Management
  - Updates from Test Centers
  - Quarantine Facilities
  - Supplies teams
  - Hospitals

Chatbots, Twitter, Website, GIS & Other Integration Possible

Get started quickly

Empower Field, Labs, Hospitals

Diagnose & Investigate faster

Live Dashboards & Interactive Reports

Save Lives

Strategy | Cloud | Automation | Security | Analytics | AI

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SURVEILLANCE OUTBREAK RESPONSE
MANAGEMENT & ANALYSIS SYSTEM

Real-time Digital Surveillance, Disease Control & Outbreak Management including early detection and Line-lists

Intelligence to transform data to insights

Cases & Notification

Controls & Outbreaks

Contacts & Cases

People

Apps

Automated systems

DETECT

Notification, Screening

VALIDATE

Investigation, Analysis

CONTROL

Treatment, Containment

Enables surveillance officers and epidemiologists to detect diseases based on real time health facility data and automatic notification

Enables decision-makers to respond immediately to incoming information and to take adequate measures via the public health officers

Information is made readily available for action and data quality assurance is performed as decontamination and isolation tasks are being carried out

Data · · · · Intelligence · · · Action

Strategy | Cloud | Automation | Security | Analytics | AI

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SURVEILLANCE OUTBREAK RESPONSE MANAGEMENT & ANALYSIS SYSTEM

Real-time Digital Surveillance, Disease Control & Outbreak Management including early detection and Line-lists

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Patient Tracker

Search Items

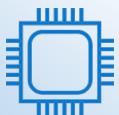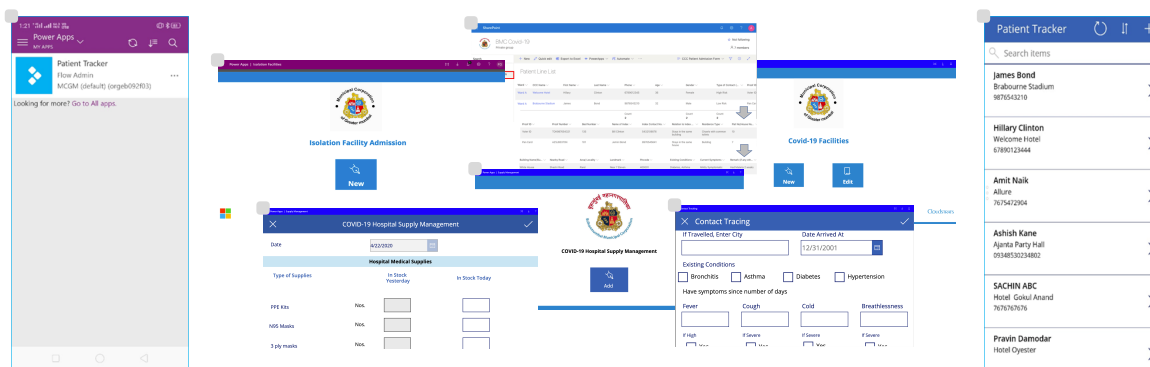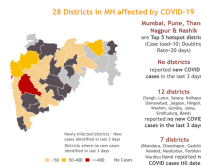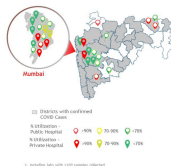**James Bond**
Brabourne Stadium
9876543210

Hillary Clinton
Welcome Hotel
6789012344

Amit Naik
Allure
7675472904

Ashish Kane
Ajanta Party Hall
09348530234802

SACHIN ABC
Hotel Gokul Anand
7676767676

Pravin Damodar
Hotel Oyester

Isolation Facility Admission

Covid-19 Facilities

COVID-19 Hospital Supply Management

Contact Tracing

If Traveled, Enter City   Date Arrived At

Existing Conditions
Bronchitis   Asthma   Diabetes   Hypertension

Have symptoms since number of days
Fever   Cough   Cold   Breathlessness

COVID'19 CURRENT CASE LOAD VIEW | MAHARASHTRA

Total Cases	Recovered %
4203	12.06
Recovered	Deaths
507	223
Critical	Asymptomatic
1590	8158

28 Districts in MH affected by COVID-19

Mumbai, Pune, Thane, Nagpur & Nashik are Top 5 hotspot districts (Case load>50; Doubling Rate<20 days)

No districts reported new COVID cases in the last 3 days

12 districts reported new COVID cases in the last 3 days

7 districts

TESTING: TESTING LABS VIEW
AS OF 14TH APRIL

Top 5 testing labs with highest % utilization

Top 5 testing labs with lowest % utilization[1]

Top 10 districts in MH by Case Load

DISTRICT LEVEL VIEW | CASE LOAD AND DEATHS

Circle	Critical	Total Progressive Admitted Positive Patient	Today Current Positive Admitted patients	Progressive Deaths Due to Corona	First Deaths Due to Other Reasons	Progressive Discharged
Akola	20	283	203	20		60
Aurangabad	30	432	312	30		90
Kolhapur	40	546	386	40		120
Nagpur	20	291	211	20		60
Nashik	60	723	483	60		180
Pune	290	3860	2700	290		870
Thane	940	11536	7776	940		2820
Total	1400	17671	12071	1400		4200

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System: All   Region: All   Facility: All   COVID Locations: All   Location Details

COVID patients
149 Total COVID patients
37 COVID positive
112 COVID PUI pending

Bed management
628 Available beds	578 Available acute care beds	20% Acute care occupancy %

Acuity type	Available beds	Occupancy %	Surge Beds
Non-Acute Care	50		
SNF	50		
Acute Care	578	20%	
ICU	500		25
TELE	20		5
Total	628	18%	49

Nurse staffing management
142 ICU Census	10 ICU Nurses Assigned	0.07 ICU Nurse to Patient Ratio

Acuity type	Census	Nurses assigned	RN partners	Nurse to Patient Ratio
Acute Care	142	11	15	0.07
IMCU	142	1	5	0.09
TELE		1	5	
Non-Acute Care		3	10	
Total	142	13	25	0.09

Discharges
169 Total Long Stay Patients
(Blank) Yesterday predictions

Equipment
30 Total Vents
19 Vents in use
11 Vents Available
19 Anticipated Next 24 Hours
42 Yesterday actual discharge

Supply by days on-hand

Supplies Information

Details

Supply	Quantity on hand	Burn rate / day	Days on hand	Supply Testing Last update
Masks w/ Shield (TIE)				
Mumbai	1,506	19	79.3	11/4/2020
Nagpur	7	2	2.5	
Nasik	8	2	1.3	
Masks w/ Shield (TCHNL)				
Mumbai	6,548	550	41.0	11/4/2020
Nagpur	7	2	3.9	
Nasik	8	2	3.5	
N-95 (SM)				
Mumbai	1,600	43	37.0	11/4/2020
Nagpur	3	1	3.1	
Nasik	7	3	2.3	
N-95 (SM)				
Mumbai	1,504	93	25.6	11/4/2020
Nagpur	6	2	3.2	
Nasik	7	3	2.4	
PPE Kit				
Mumbai	158	13	11.6	
Nagpur	7	2	3.3	
Nasik	4	1	4.0	
Duckbill w/ Shield (RGS)				
Total	9,900	335	29.6	11/4/2020

COVID Patient Information

149 Total COVID patients	112 COVID PUI pending	37 COVID positive

Details

Facility Name	COVID PUI pending	COVID positive	COVID Last Update
Mumbai			
TELE			
- Covid Testing	40	10	50	4/13/2020
Nagpur			
IMCU			
Covid room	18	7	25	4/13/2020
Nasik			
SNF			
Testing Wing	52	97	149	4/10/2020

COVID positive and COVID PUI pending by Date

COVID positive and COVID PUI pending by Acuity

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